OVERVIEW OF FOOD CONSUMTION EVOLUTION IN THE CONTEXT OF FOOD SECURITY

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Abstract

Food security is a major problem that human society faces today and can be addressed by analyzing food availability and / or consumption of food. The purpose of this paper is to highlight the evolution of the main indicators characterizing food security and attempts to highlight the size of the problem in Romania in particular through the use of statistical methods to quantify indicators of food consumption.

Key words: food security, food consumption, food supply

INTRODUCTION

Food security is a phenomenon directly related to the individual who seeks to on the one hand ensure food availability and on the other hand ensure public access to these resources. Measurement of food security is realized through a system of indicators focused on offering evolution of food demand, food product demand, how to cover the supply through demand etc. Consumption indicators give us a vision of food demand size and thus a vision of consumer behavior in their process of accessing food availability.

MATERIAL AND METHOD

The purpose of this paper is to analyze food security through the main indicators of food consumption. To this end we focused on indicators of the structure and dynamics of food consumption in the period 2005-2010.

RESULTS AND DISCUSSIONS

In our country the consumption of food and non-alcoholic beverages in 2005-2010 represented over 40% of total consumption expenditure (Table 1). In 2010 the share of spending on food products and soft drinks reached 53.8% in farming households and 53.7% in unemployed households. This lower share in employees' households shows that with lower living standards, food and non-alcoholic beverage costs tend to increase.

Table 1

Structure of total consumption expenditure of households

	2005	2006	2007	2008	2009	2010
Total households - lei, monthly per household						
Total consumption expenditure	863.89	962.50	1104.70	1365.36	1468.60	1486.43
Agro-food products and non-alcoholic drinks	44.2	42.3	41.7	40.9	40.9	41.0
Employees						
Total consumption expenditure	1132.17	1251.38	1456.2	1727.84	1836.94	1849.57
Agro-food products and non-alcoholic drinks	39.2	37.9	37.1	37.2	37.4	37.6
Farmers						
Total consumption expenditure	658.18	693.93	779.40	931.25	1103.67	1065.70
Agro-food products and non-alcoholic drinks	57.8	57.1	56.5	55.9	53.2	53.8
Unemployed						
Total consumption expenditure	743.36	842.42	931.84	1097.92	1265.17	1317.84
Agro-food products and non-alcoholic drinks	55.4	53.7	53.5	55.0	54.0	53.7
Pensioners						
Total consumption expenditure	695.80	777.72	880.99	1135.50	1253.30	1286.43
Agro-food products and non-alcoholic drinks	53.1	50.8	51.3	49.0	49.0	49.0

Sourse: National Institute of Statistics

Population behavior on consumption is emphasized better by the annual consumption indicators of agro-food products. Thus, we can see in the following table, for vegetable products, an increased consumption of vegetables, vegetable fats and potatoes, and a decrease of almost 20% of fruit and sugar. Regarding the consumption of animal products, except fish products shall be observed declines of over 15% for meat and eggs and around 6% in animal fat and milk.

Table 2

Yearly average consumption, for the main food products, per inhabitant

	UM	2005	2006	2007	2008	2009	2010	2010/2005
Crop products								
Cereals and cereal products - in equivalent grains	kg	214.8	207.9	206.9	204	200.8	199.6	92.9
Cereals and cereal products - in equivalent flour	kg	162.6	157.3	156	154.1	151.7	150.4	92.5
Potatoes	kg	98	97.4	96.1	99.5	93.1	98.2	100.2
Vegetables and vegetable products (equivalent fresh vegetables) dried pulses and melons	kg	162.6	181.7	164.1	176	168.2	174.4	107.3
Fruit and fruit products (equivalent fresh fruit)	kg	75.9	83.2	67.8	66.7	62.3	63.3	83.4
Sugar and confectioneries (equivalent refined sugar)	kg	27.4	29	24.9	23.2	25.8	22.1	80.7
Vegetal fats (gross weight)	kg	14.6	15.4	13.8	14.6	16	14.8	101.4
Animal products								
Milk and dairy products in equivalent milk 3,5% fat (butter excluded)	liters	239.2	246.6	252.8	254.7	233.2	224	93.6
Eggs	pieces	284	277	268	267	243	239	84.2
Fish and fish products (fresh fish	kg	4.5	4.6	3.8	4	4.8	4.6	102.2

	UM	2005	2006	2007	2008	2009	2010	2010/2005
equivalent)								
Meat, meat products and edible offals (equivalent fresh meat)	kg	68.3	69.9	66.7	66.6	67.5	60	87.8
Animal fats (gross weight)	kg	3.6	3.8	3.3	3.3	3.9	3.4	94.4

Source: National Institute of Statistics

Reasons for those changes in behavior are varied, such as higher prices, lower living standards and orientation towards a healthy part of the population. But if we analyze daily food consumption for the main products, there is clearly a decrease in basic food nutritional values of the population, a decrease of about 3-10% of calories, proteins and assimilated fats.

Table 3

Daily average food consumption, (expressed in calories and nutrients), per inhabitant

	UM	2005	2006	2007	2008	2009	2010	2010/2005
Calories	number	3385	3455	3290	3300	3273	3147	93.0
of which: Animal origin	number	897	925	912	920	888	833	92.9
Proteins	grams	112.2	114.3	111.2	111.5	107.7	103.4	92.2
of which: Animal origin	grams	57.4	58.6	57.6	57.7	55.8	51.7	90.1
Fats	grams	101.7	107.5	101.3	104.4	105.3	98.9	97.2
of which: Animal origin	grams	57.2	59.1	57.8	58.6	57.3	53.6	93.7
Carbohydrates	grams	483.9	485.4	462.4	457.8	452.7	440.5	91.0

Source: National Institute of Statistics

Comparison between per capita consumption and production per capita (ratio between agricultural production and population) allows us to see that our country has the potential to ensure food security from own resources, with potential for export of cereals, potatoes and eggs.

Table 4

Yearly average consumption and production, for the main food products, per inhabitant

	UM	2005	2006	2007	2008	2009	2010
Crop products							
Cereals and cereal products - in equivalent grains	kg	214.8	207.9	206.9	204	200.8	199.6
Production per capita	kg	894.6	730.1	362.8	782.5	692.7	779.8
Production/consumption share	**%**	**416.5**	**351.2**	**175.4**	**383.6**	**345.0**	**390.7**
Potatoes	kg	98	97.4	96.1	99.5	93.1	98.2
Production per capita	kg	172.9	186.1	172.4	169.7	186.5	153.2
Production/ consumption share	**%**	**176.4**	**191.1**	**179.4**	**170.6**	**200.3**	**156.0**
Vegetables and vegetable products (equivalent fresh vegetables) dried pulses and melons	kg	162.6	181.7	164.1	176	168.2	174.4
Production per capita	kg	167.6	191.8	144.7	177.6	181.7	180.3
Production/consumption share	**%**	**103.1**	**105.6**	**88.2**	**100.9**	**108.0**	**103.4**
Animal products							

	UM	2005	2006	2007	2008	2009	2010
Milk and dairy products in equivalent milk 3,5% fat (butter excluded)	liters	239.2	246.6	252.8	254.7	233.2	224
Production per capita	liters	280.3	299.3	283.4	274.4	262.6	229.2
Production/consumption share	**%**	**117.2**	**121.4**	**112.1**	**107.7**	**112.6**	**102.3**
Eggs	pieces	284	277	268	267	243	239
Production per capita	pieces	338.1	344.2	302.8	311.2	289.3	289.2
Production/ consumption share	**%**	**119.0**	**124.3**	**113.0**	**116.6**	**119.1**	**121.0**
Meat, meat products and edible offals (equivalent fresh meat)	kg	68.3	69.9	66.7	66.6	67.5	60
Production per capita	kg	69.7	64.9	69.8	66.3	67.2	60.9
Production/ consumption share	**%**	**102.0**	**92.8**	**104.6**	**99.5**	**99.6**	**101.5**

Source: National Institute of Statistics

But we must not lose sight of the fact that much of this production does not reach the end consumer and repeatedly resorting to imports. Thus, food security remains an important issue especially given the high degree of development of self-consumption and lack of distribution channels that create failure in local production entering domestic market.

CONCLUSIONS

Food security seen through changes in consumption demonstrates a lowering of living standards achieved by reducing consumption in animal products and some plant products, and decrease of nutritional value of the daily ration. The potential to ensure food security from own resources exist, but it can be achieved only if the agro-food system can create real links between domestic production and population consumption.

REFERENCES

1. Romanian Statistical Yearbook 2011, National Institute of Statistics